

MATERIA MEDICA AND PHARMACY.

7. *Danger of Subcutaneous Injections.*—Prof. NASSEBAUM, of Munich, has just published an interesting account of an accident which happened to himself. Suffering from neuralgia, he had injected morphia under his own skin more than 2000 times—sometimes to the extent of five grains of morphia in twenty-four hours. Two months ago, he injected two grains of acetate of morphia dissolved in fifteen minims of water, and accidentally sent it direct into a subcutaneous vein instead of into the cellular tissue. He gives a graphic account of his dangerous position for two hours, after which the effect passed off. He has seen similar effects in a smaller degree in two of his patients, and the practical lessons are, that it may be impossible to avoid veins at all times, and one may be punctured unawares, subcutaneous injection should always be done *very slowly*. The effects are so instantaneous that the syringe can be stopped at the first sign of danger, and some of the injected fluid mixed with blood may even be sucked out again by the syringe. It is very remarkable how the effects of the same dose of the same substance differ when directly injected into a vein and mixed with the venous blood, and when they filter into the blood from the cellular tissue through the unbroken coats of the vessels.”—*Med. Times and Gaz.*, Sept. 23, 1865.

8. *Physiological Action on Certain of the Amyl Compounds.*—Dr. B. W. RICHARDSON communicated to the British Association for the Advancement of Science at its meeting in September last, a second report on this subject. In his previous report he had studied the action of the nitrite of amyl; in the present he considered amyl alcohol, hydruret of amyl, acetate of amyl, and iodide of amyl. The hydruret is an anæsthetic, and produces symptoms akin to somnambulism. Amylic alcohol (hydrated oxide of amyl) produces, after long administration, insensibility to pain and peculiar rigors, which may be sustained many hours. Acetate of amyl exercises a similar influence; whilst iodide of amyl produces, in addition to the same symptoms, profuse secretion. Each one of the series destroys the voluntary power of the muscles, but not the vis insita; their action seems to be purely on the nervous system, and specially on the centres of motion.

The practical conclusions to which the author had arrived were three in number, but we are able only to notice them in the briefest manner, omitting the reasons on which they were based. First, he thought that none of these bodies were safe as anæsthetics; they would not replace ether and chloroform, but they, especially the iodide, might be employed in tetanus with promise of good. Secondly, the investigation taught a useful lesson in regard to the alliance of the symptoms produced with the symptoms of various diseases. It was possible that in some diseases analogous compounds were formed in the body from amylaceous matter under the influence of perverted chemical action. Thirdly, the experiments were of great moment, as indicating how the substitution of one element for another in an organic compound modifies the action of such organic substance on the body.—*Med. Times and Gaz.*, Sept. 30, 1865.

9. *Modification in Canquoin's Caustic Paste.*—This valuable caustic would be still more employed were its application not somewhat difficult; and one of M. Demarquay's pupils has contrived a modification in its composition which renders its application very easy and effectual. The paste thus formed consists of chloride of zinc ten, flour twenty, and glycerine four parts. So prepared, it can be applied to the part to be destroyed with great facility, however varied this may be in shape or direction, and can as easily be washed away. M. Demarquay has frequently employed it, and finds the paste thus prepared with glycerine instead of water far preferable, both with respect to its application and the results.—*Med. Times and Gaz.*, Dec. 2, 1865, from *Bull. de Thérap.*, Sept. 15.

10. *New Anæsthetic Mixture.*—M. BAKER BROWN, Jr., exhibited to the Obstetrical Society of London (Oct. 4) a preparation of two parts of chloroform with

one of alcohol to which the distilled essence of eau de Cologne had been added, which he had found to allay the pain of labour without complete anæsthesia, and recited cases in which it had been used.—*Med. Times & Gaz.*, Nov. 11, '65.

MEDICAL PATHOLOGY AND THERAPEUTICS, AND PRACTICAL MEDICINE.

11. *The Use of the Thermometer in Acute Disease.*—In the *Lancet* (Nov. 4, 1865) we find the following interesting clinical remarks on the use of the thermometer in medical diagnosis, by Dr. SIDNEY RINGER.

"During acute inflammations of any of the tissues of the body, the temperature is always abnormally elevated, often greatly so. Not unfrequently it rises from 98° or 99° (the normal temperature in the axilla) to 103° or 105° F. The amount of elevation is proportionate to the intensity of the inflammation, and thus the temperature measures its intensity and duration. In acute Bright's disease (acute inflammation of the kidney), we have such an elevation of the temperature of the body, and thus we are able in such cases, by means of the temperature, to estimate exactly the duration and intensity of the inflammation. When the inflammation ceases the temperature becomes normal, and is not elevated by those chronic changes that follow in the kidney the acute inflammation. In many cases of acute Bright's disease, long after the temperature has become normal, and, consequently, after the inflammation has ceased, blood continues to pass with the urine from the kidneys. This continuance of the blood in the urine is very generally received as evidence of the continuance of the acute inflammation, and the patient is often cupped over the loins, and low diet given, with the hope of lowering this imaginary inflammation. But no such conclusion can be arrived at from the presence of blood in the urine; and such a conclusion sometimes misleads the medical man, and causes him to adopt a course of treatment at least useless. But such treatment has a positive injurious influence on the chronic disease. For this chronic disease following the acute is chiefly due to the previous impaired health of the patient. If this has been good, in most cases no chronic disease follows; but if the patient's health has been broken down from any cause the chronic disease is very apt to follow on the acute. Thus any treatment that will still further increase the anæmia, or otherwise lessen the nutrition of the body, is liable to produce chronic changes in the kidney or to greatly prolong their duration. Thus such treatment should be carefully avoided. It is in accordance (Dr. Ringer said) with his experience that, on the cessation of the acute stage, the passage of blood and other evidences of the chronic disease are best treated by those means and medicines that tend to promote most perfectly the nutrition of the body. Hence, as the treatments of the acute and chronic inflammation of the kidney are thus often opposed, it becomes of importance to ascertain the most valuable symptom by means of which we can learn when the acute stage has ended and the chronic begun. The temperature of the body gives us the most important information, and it is superior to all the other symptoms, as it is the only constant one. The next in value is the quantity of urine, for, generally, when the acute stage ends the quantity of urine greatly increases; but there are many exceptions to this rule, whilst in all cases, at the termination of the acute stage, the temperature becomes normal.

"The amount of anasarca is greatly determined by the amount of anæmia existing. Thus if the anæmia be marked, the anasarca is great. In many cases during the acute stage and commencement of the chronic there is no anasarca; but as the anæmia progresses, the anasarca is developed and much increased. This symptom is thus best treated by those means which promote the nutrition of the body, both by directly lessening the anæmia and by assisting to restore the kidney to its healthy state. Warm baths and purgatives during the chronic stage should be used with caution, as they easily cause great anæmia and impair